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APR 27 1970

CURRENT SERIAL REQUEST

WATER SUPPLY OUTLOOK FOR ARIZONA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE--SOIL CONSERVATION SERVICE,
SALT RIVER VALLEY WATER USERS ASSOCIATION
and
ARIZONA AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies
named above in cooperation with the Federal, State and pri-
vate organizations listed on the last page of this report.

AS OF
APR. 1, 1970

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES.

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P O Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR ARIZONA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT
ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

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Released by

M. D. BURDICK
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
PHOENIX, ARIZONA

In Cooperation with

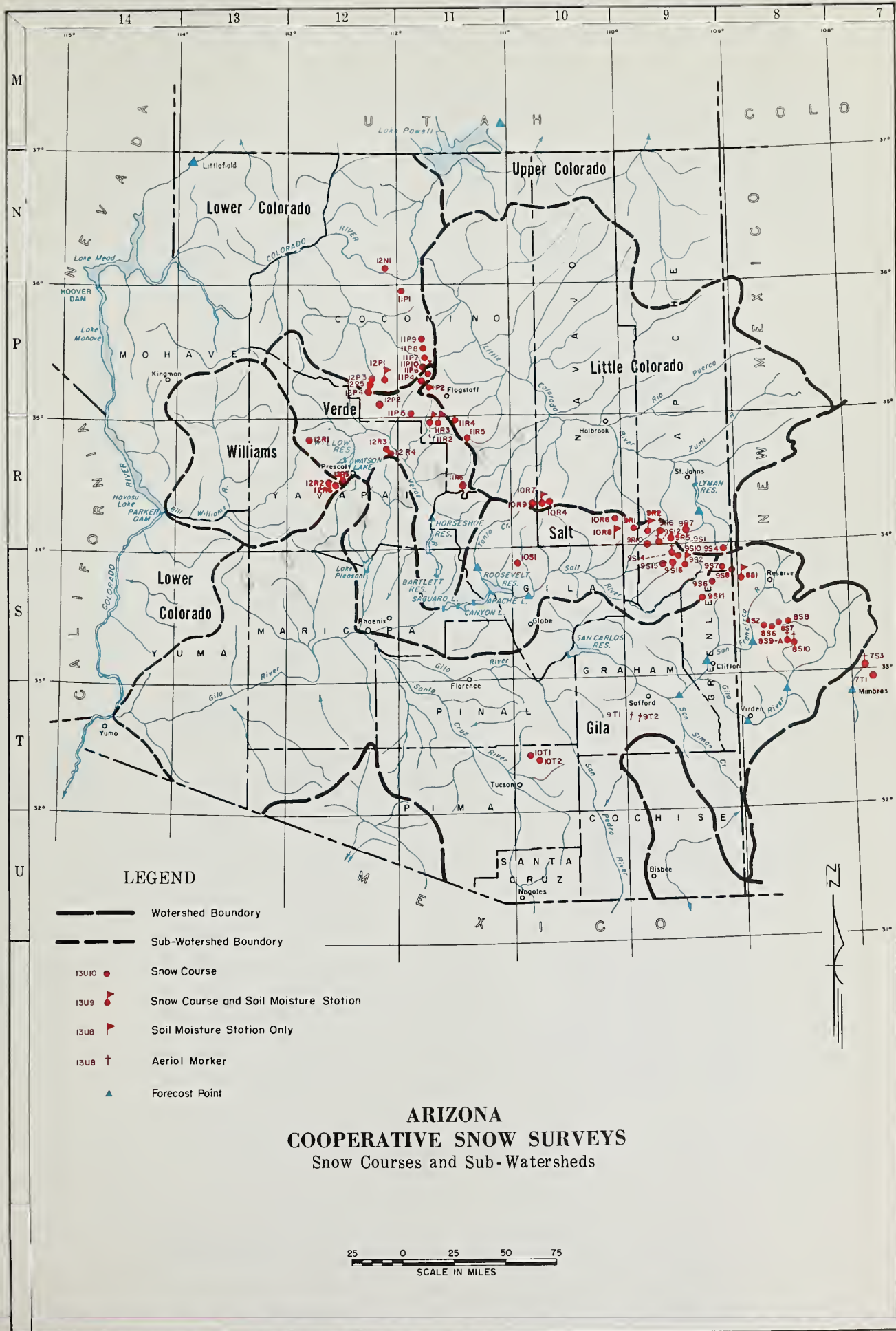
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USERS ASSOCIATION

////////////////////////////////////
Report prepared by

RICHARD W. ENZ, Snow Survey Supervisor

SOIL CONSERVATION SERVICE
ROOM 6029 FEDERAL BUILDING
PHOENIX, ARIZONA 85025



INDEX to SNOW COURSES and SOIL MOISTURE STATIONS

Number	Name	Sec.	Twp.	Rge.	Elev.	River Basin
11P10-A	Agassiz	32	23N	7E	11200	Little Calarada
11R6	Baker Butte (p)	4	12N	9E	7300	Verde
9S1-A	Baldy (p)	28	7N	27E	9125	Little Calarada
9S15	Baldy #2	12	6N	26E	10000	Little Calarada
9S16	Baldy #3	13	6N	26E	11000	Little Calarada
10T1	Bear Wallaw	6	12S	16E	8100	Gila
9S6	Beaver Head	13	4N	30E	8000	San Francisco
12P5	Bill Williams Intermediate	17	21N	2E	8550	Lower Calarada
12P4	Bill Williams Summit	17	21N	2E	8950	Lower Calarada
9S10-A	Black River Divide	10	6N	27E	9400	Salt
12N1	Bright Angel	34	33N	3E	8400	Lower Calarada
12R1	Camp Waad	3	16N	6W	5700	Verde
10R7-M	Canyon Creek #2	18	11N	15E	7500	Little Calarada
10R9	Canyon Point (p)	28	11N	14E	7600	Salt
11R2-M	Casner Park	19	18N	8E	6930	Verde
12P1-M	Chalender	27	22N	3E	7100	Verde
9R7	Cheese Springs	28	8N	27E	8600	Little Calarada
12R6	Copper Basin Divide (p)	23	13N	3W	6720	Verde
10R8-A	Carduray Creek	4	8N	21E	6000	Salt
9S7	Caranada Trail	26	5N	30E	8000	San Francisco
9T2-A	Crazy Harse	34	8S	24E	10200	Gila
7T1	Emary Pass #1	16	16S	9W**	7800	Mimbres
7T2	Emary Pass #2	16	16S	9W**	7800	Mimbres
10R6	Forest Dale	2	9N	21E	6430	Salt
9R5	Ft. Apache	18	7N	27E	9160	Little Calarada
11P2	Ft. Valley (p)	22	22N	6E	7350	Little Calarada
8S1-M	Frisca Divide	31	6S	20W**	8000	San Francisco
12R4	Gaddes Canyon	11	15N	2E	7600	Verde
11P1	Grand Canyon	21	30N	4E	7500	Lower Calarada
9S11	Hannagan Meadows (p)	19	3N	29E	9090	Salt
11R5	Happy Jack	30	17N	9E	7630	Verde
9R10	Hawley Lake	13	7N	24E	8300	Salt
10R4	Heber (p)	28	11N	15E	7600	Little Calarada
9T1-A	High Peak	34	8S	24E	10500	Gila
8S9-A	Hummingbird	19	11S	17W**	10550	San Francisco
8S6	Ice King	6	11S	18W**	8020	San Francisco
11P9	Inner Basin #1 (p)	28	23N	7E	10000	Little Calarada
11P8	Inner Basin #2 (p)	28	23N	7E	9750	Little Calarada
11P7	Inner Basin #3	3	23N	7E	10250	Little Calarada
12R2	Iran Springs	22	14N	3W	6200	Bill Williams
9S2-A	Maverick Fark (p)	13	6N	27E	9150	Salt
7S3-A	McKnight Cabin	10	15S	10W**	9300	Mimbres
9R2-M	McNary	23	8N	23E	7200	Salt
9R1	Milk Ranch	33	8N	23E	7000	Salt
12R3	Mingus Mauntain	3	15N	2E	7100	Verde
8S2	Magallan	2	11S	19W**	7000	San Francisco
11R4	Marman Lake	13	18N	8E	7350	Little Calarada
11R3-M-A	Marman Mauntain (p)	14	18N	8E	7500	Verde
9S12-A	Mt. Ord	4	6N	26E	11000	Salt
11P5-M	Newman Park	25	19N	6E	6750	Verde
9S4	Nutriasa	23	6N	30E	8500	San Francisco
8S7	Redstane Trail	5	11S	18W**	8600	San Francisco
10T2	Rase Canyon	15	12S	16E	7300	Gila
8S8	Silver Creek Divide	4	11S	18W**	9000	San Francisco
9S14-A	Smith Cienega	10	6N	26E	9850	Salt
11P4	Snaw Bowl #1 (p)	36	23N	6E	10260	Verde
11P6	Snaw Bowl #2	31	23N	7E	11000	Verde
9S8	State Line	6	6S	21W**	8000	San Francisco
12P2	White Harse Lake Jct.	2	20N	2E	7150	Verde
12R5	White Spar	19	13N	2W	6000	Verde
8S10-A	Whitewater	19	11S	17W**	10750	Gila
12P3	Williams Ski Run	9	21N	2E	7720	Lower Calarada
9R6	Wilson Lake (p)	4	7N	26E	9000	Salt
10S1	Warkman Creek	33	6N	14E	6900	Salt

M SOIL MOISTURE STA.
(p) STORAGE GAGE

A AERIAL SNOW DEPTH MARKER

SOIL MOISTURE STA. ONLY
NM PRINCIPAL MERIDIAN

ARIZONA WATER SUPPLY OUTLOOK
APRIL 1, 1970

* * * * *
* Heavy precipitation during March has greatly improved the water *
* supply outlook. With much above average water in storage and runoff *
* forecasts again increased, good water supplies are in prospect for *
* all areas served by storage facilities. Streamflow forecasts are, *
* nevertheless, still significantly below average. *
* * * * *

SNOW COVER

The March 31 storm resulted in heavy snow accumulation on the Verde Watershed, temporarily bringing the snow cover to much above average. The snow pack is now near normal on the Little Colorado Watershed, 80% of average on the Salt and Gila, and 70% above average on the Verde. Extremely heavy snowfall on the San Francisco Peaks prevented snow surveyors from reaching the Inner Basin. Eight to nine feet of snow is estimated to be there. This survey will be made next week when the snow becomes more firm.

PRECIPITATION

Flagstaff experienced the heaviest March precipitation in 72 years of official record, with a total of 6.75". Several stations on the Verde and Salt Watershed received more moisture in March than in the previous four months combined. Accumulated winter precipitation is now near normal on the Verde Watershed and 80% of average on the Salt and Little Colorado.

SOIL MOISTURE

The March storms, accompanied by warm temperatures, have left soils very wet on all watersheds. High yield may be expected from subsequent precipitation.

RESERVOIR STORAGE

Stored water in all major Arizona reservoirs is very good. Salt River Project Reservoirs, presently containing 67% of capacity, are 24% above average for this date. San Carlos and Lake Pleasant are 42 and 73% above average respectively. Lyman Reservoir, which has been rising steadily, now contains almost twice the normal amount. Reservoir storage in the Colorado River Reservoirs is 54% above average and 53% of capacity.

STREAMFLOW AND WATER SUPPLY

Much above normal precipitation on all watersheds except the Gila resulted in raising streamflow forecasts. Runoff on the Salt River Project streams was increased 26,000 a.f. above the previous forecast. In spite of the improved conditions the January-May runoff is still much below average, ranging from 45% of average on the Gila to 68% on the Verde. The only near average runoff expected this year is on the Colorado River, where 7,214,000 a.f. is expected. This is 10% above average.

Water supplies will be adequate on all projects served by stored water. Considerable pumping, however, will be required along the Upper Gila and on the San Carlos Project.

THIS IS THE FINAL REPORT OF THE SEASON.

ABOUT APRIL STREAMFLOW FORECASTS 1, 1970

STREAMFLOW FORECASTS 1, 1970		THIS YEAR		PAST RECORD	
BASIN STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average †
<u>SALT RIVER DRAINAGE</u>					
Salt nr. Roosevelt	70.0	58	Apr-May	205.5	121.7
Tonto Creek nr. Roosevelt	3.2	42	Apr-May	8.8	7.7
Verde River above Horseshoe	35.0	70	Apr-May	63.7	50.1
<u>GILA RIVER DRAINAGE</u>					
Gila River nr. Gila	12.5	74	Apr-May	12.6	16.8
Gila River nr. Solomon	17.5	51	Apr-May	21.5	34.6
Gila River nr. Virden	10.0	57	Apr-May	12.1	17.4
Frisko River at Clifton	9.0	48	Apr-May	13.6	18.9
Frisko River at Glenwood	4.0	49	Apr-May	4.4	8.1
<u>MIMBRES RIVER DRAINAGE</u>					
Mimbres River nr. Mimbres	0.7	54	Apr-May	.3	1.3
<u>COLORADO RIVER DRAINAGE</u>					
Little Colo. River above Lyman Dam	1.8	30	Apr-June	6.9	6.1
Colo. River - Lake Powell Inflow *	7214.0	110	Apr-July	8162.0	6527.0
<u>VIRGIN RIVER DRAINAGE</u>					
Virgin River nr. Littlefield	19.0	57	Apr-June	182.9	33.4
<u>GRANITE CREEK DRAINAGE</u>					
Granite Creek	0.8	---	Apr-May	-----	---
Willow Creek	0.2	---	Apr-May	-----	---
Gila near Solomon is predicted to drop to 100 cfs on April 28.					
* Forecast Issued by Soil Conservation Service, Salt Lake, City, Utah.					
† Average is for 15-year period, 1953-67.					
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1970
SEASONAL RUNOFF

STREAM & STATION	Measured	Forecast	Total - January thru May		
	Runoff Jan-Mar.	Runoff April-May	1970	15-Year Average	% of Average
Salt River at Intake	64.5	70	134.5	280.9	48
Verde River above Horseshoe	82.4	35	117.4	171.9	68
Tonto Creek above Roosevelt	9.4	3.2	12.6	42.6	30
Gila River nr. Virden	22.0	10.0	32.0	59.3	54
Gila River nr. Solomon	36.7	17.5	54.2	119.6	45
Frisco River at Clifton	17.4	9.0	26.4	59.8	44
Little Colorado	3.8 ^{1/}	1.8 ^{2/}	5.6 ^{3/}	9.3	60

Provisional streamflow data supplied by Salt River Project and U.S. Geological Survey.

1/ January-March runoff based on change in storage of Lyman Reservoir.
(Supplied by Arizona State Parks Board).

2/ April-June period.

3/ January-June period.

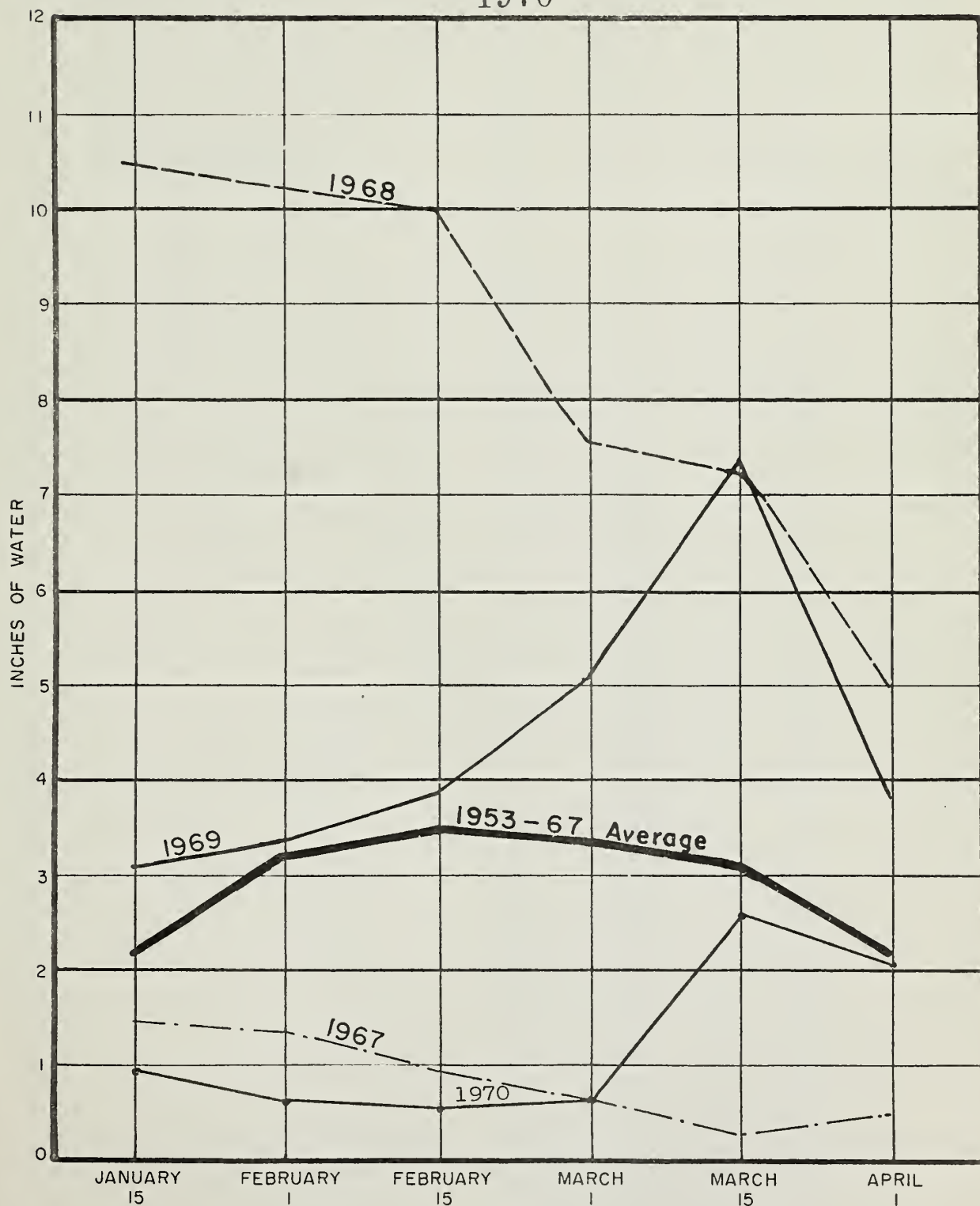


ABOUT APRIL 1, 1970

RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average†
<u>GILA RIVER DRAINAGE</u>					
Agua Fria	Lake Pleasant	157.6	76.5	113.6	44.1
Granite	Watson Lake	4.7	3.5	4.7	---
Granite	Willow Creek	6.1	2.3	3.4	---
Gila	San Carlos	984.9	167.5	446.2	118.2
Verde (2)	Bartlett & Horseshoe	317.7	139.8	251.3	131.0
Salt (4)	Roosevelt, Apache, Canyon & Saguaro	1755.0	1,266.2	1584.5	1002.5
<u>COLORADO RIVER DRAINAGE</u>					
Colorado	Lake Havasu	619.4	543.1	554.8	554.5
Colorado	Lake Mohave	1810.0	1,609.4	1653.0	1695.9
Colorado	Lake Mead	26159.0	16,597.0	15386.0	16072.4
Colorado	Lake Powell	25002.0	9,535.0	9390.0	---
Little Colorado	Lyman	30.6	21.0	19.3	10.8
Little Colorado	Show Low Lake	5.1	.4	2.5	2.3
* Average is for less than 15 years of record in the 1953-67 period.					
† Average is for 15-year period, 1953-67.					
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RELATIVE SNOW WATER ACCUMULATION ARIZONA 1970



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This graph represents the average snow water content on eleven selected snow courses on Arizona Sub-Watersheds.

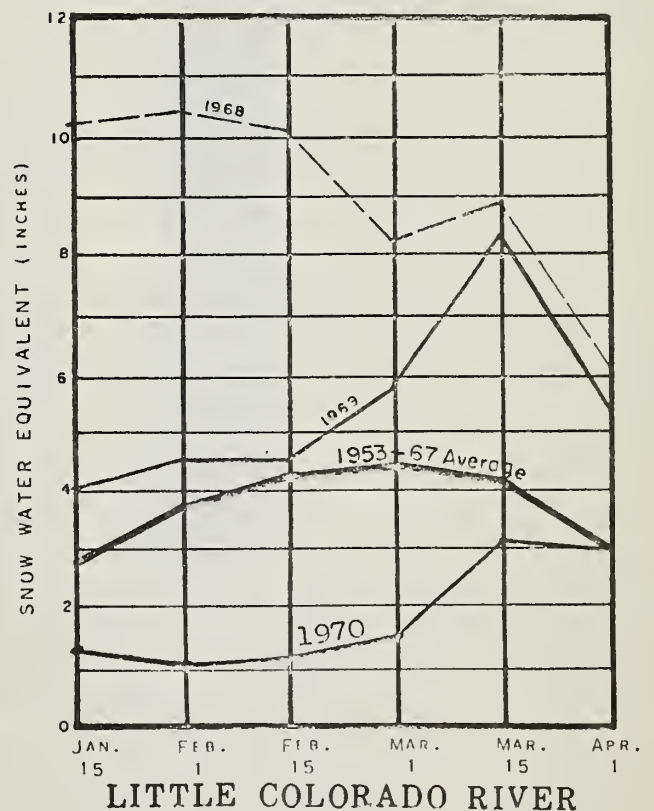
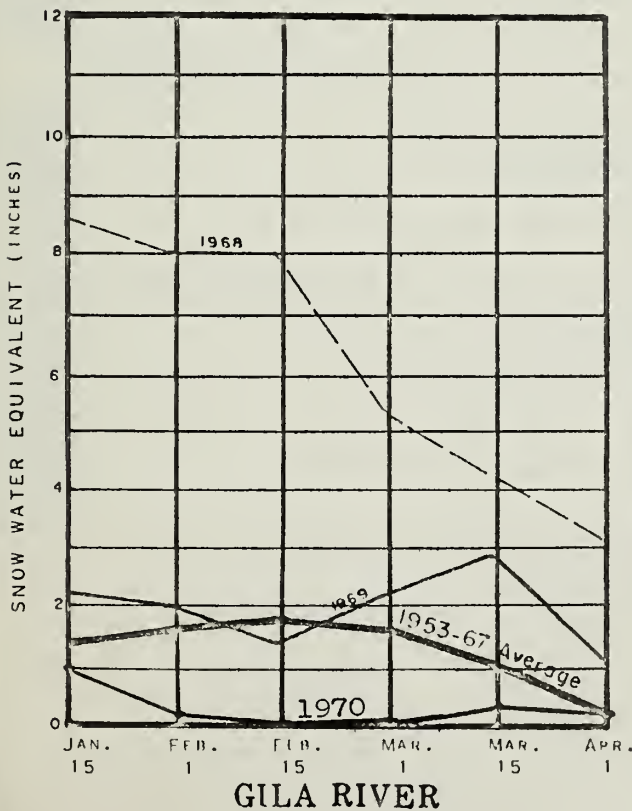
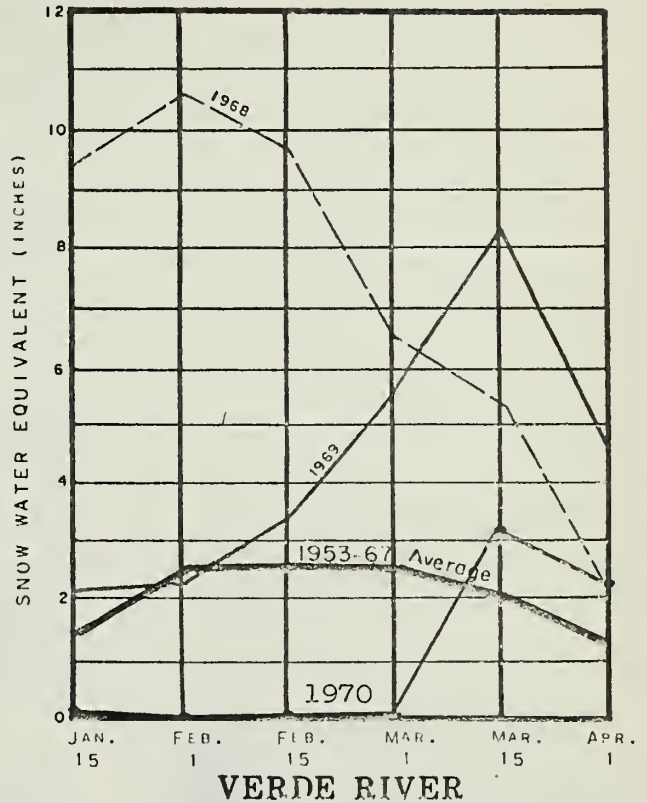
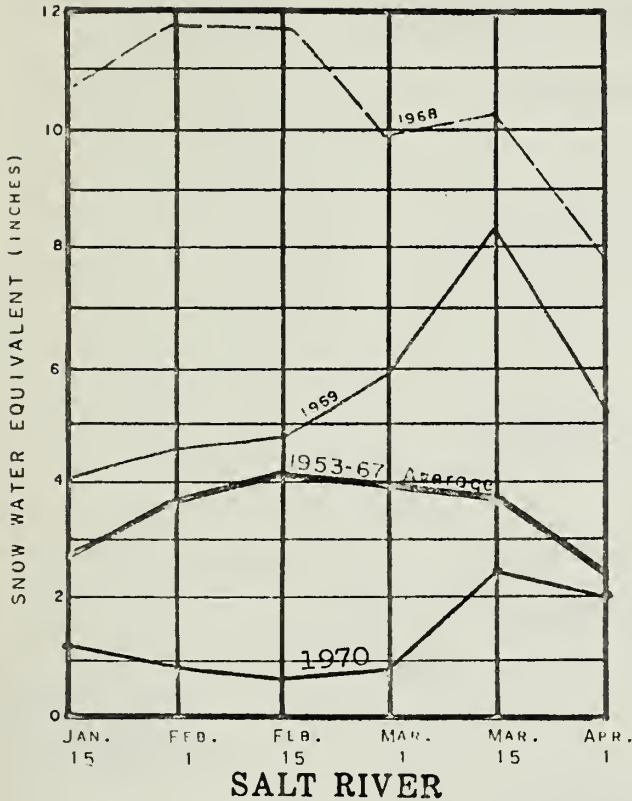
SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

APRIL 1, 1970

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF:	
		Last Year	Average
Gila	6	22	80
Salt	9	37	80
Verde	7	51	170
Little Colorado	4	56	101
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1970 ARIZONA SNOW COVER BY WATERSHEDS



WATER SUPPLY INVENTORY
SALT RIVER VALLEY SYSTEM

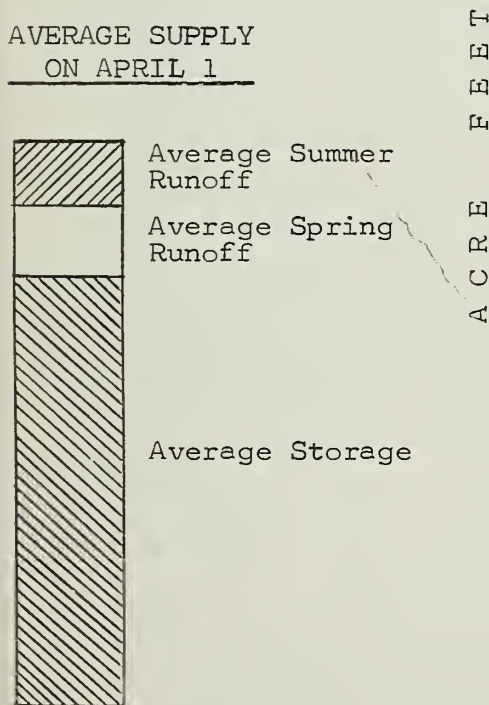
APRIL 1, 1970

3,000,000

2,500,000

2,000,000

AVERAGE SUPPLY
ON APRIL 1



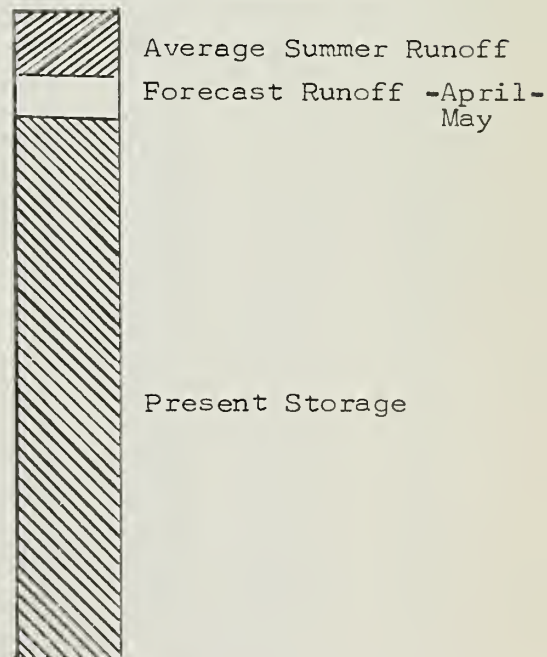
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ANTICIPATED 1970 SUPPLY



* Based on Present Storage + Forecast Spring Runoff + Average Summer Runoff

SNOW

ABOUT APRIL 1, 1970

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †
<u>GILA RIVER</u>						
Bear Wallow	8100	3/31	6	2.5	0.0	2.0
Beaver Head	8000	3/30	T	T	1.5	1.0
Coronado Trail	8000	3/31	0	0.0	3.7	0.2
Crazy Horse (A)	10200	N O	S U R V E Y		16.2	---
Emory Pass #1 *	7800	3/30	0	0.0	0.0	---
Emory Pass #2 *	7800	3/30	0	0.0	0.0	---
Frisco Divide	8000	4/2	0	0.0	0.4	0.4
Hannagan Meadows *	9090	3/30	21	7.8	15.1	---
High Peak (A)	10500	N O	S U R V E Y		15.0	---
Hummingbird (A)	10550	4/1	53	15.9	19.0	---
Ice King	8020	3/31	18	5.9	6.2	5.7**
McKnight Cabin *	9300	4/1	0	0.0	4.4	---
Mogollon	7000	3/31	T	T	0.0	0.0
Nutrioso	8500	3/31	0	0.0	1.6	0.2
Redstone Trail	8600	3/31	24	7.6	7.8	6.8**
Rose Canyon	7300	3/31	T	0.0	0.0	0.4
Silver Creek Divide	9000	3/31	38	11.5	14.5	10.0**
State Line	8000	4/2	0	0.0	0.4	0.2
Whitewater (A)	10750	4/1	76	21.3	21.7	---
<u>SALT RIVER</u>						
Baldy #2 *	9750	3/19	60	17.3	28.1	---
Baldy #3 *	10950	3/19	74	20.2	36.6	---
Baldy *	9125	3/30	14	4.0	9.9	5.3
Beaver Head	8000	3/30	T	T	1.5	1.0
Canyon Creek	7500	3/31	4	0.5	2.0	1.0**
Canyon Point	7600	3/31	5	0.6	1.3	---
Coronado Trail	8000	3/31	0	0.0	3.7	0.2
Forest Dale	6430	3/31	T	0.0	0.0	0.0
Ft. Apache	9160	3/30	23	6.9	9.6	6.1
Hannagan Meadows	9090	3/30	21	7.8	15.1	---
Hawley Lake	8300	3/27	6	1.3	7.4	---
Heber	7600	3/31	4	0.5	2.6	1.1
Maverick Fork	9050	3/30	15	4.7	12.7	6.8
McNary	7200	3/27	2	0.2	0.4	0.3
Milk Ranch	7000	3/27	2	0.3	0.0	0.1
Mt. Ord (A)	11000	3/19	72	19.8	35.9	---
Nutrioso *	8500	3/31	0	0.0	1.6	0.2
Smith Cienega (A)	9850	3/19	65	18.2	31.4	---
Wilson Lake	9000	3/30	30	9.3	15.6	---
Workman Creek	6900	3/30	0	0.0	7.3	1.5
Mt. Ord (correction for 2/27 reported as 0)	11000	2/27	36	11.8	26.0	---
<u>BILL WILLIAMS RIVER</u>						
Camp Wood *	5700	3/31	2	0.3	0.0	0.1
Copper Basin Divide	6720	3/31	1	0.2	0.0	0.0**
Iron Springs	6200	3/31	1	0.3	0.0	0.0
† 1953-67 15-year average. (*) Adjacent drainage. (**) Adjusted Average. (A) Aerial observation: water contents estimated.						

ABOUT APRIL 1, 1970

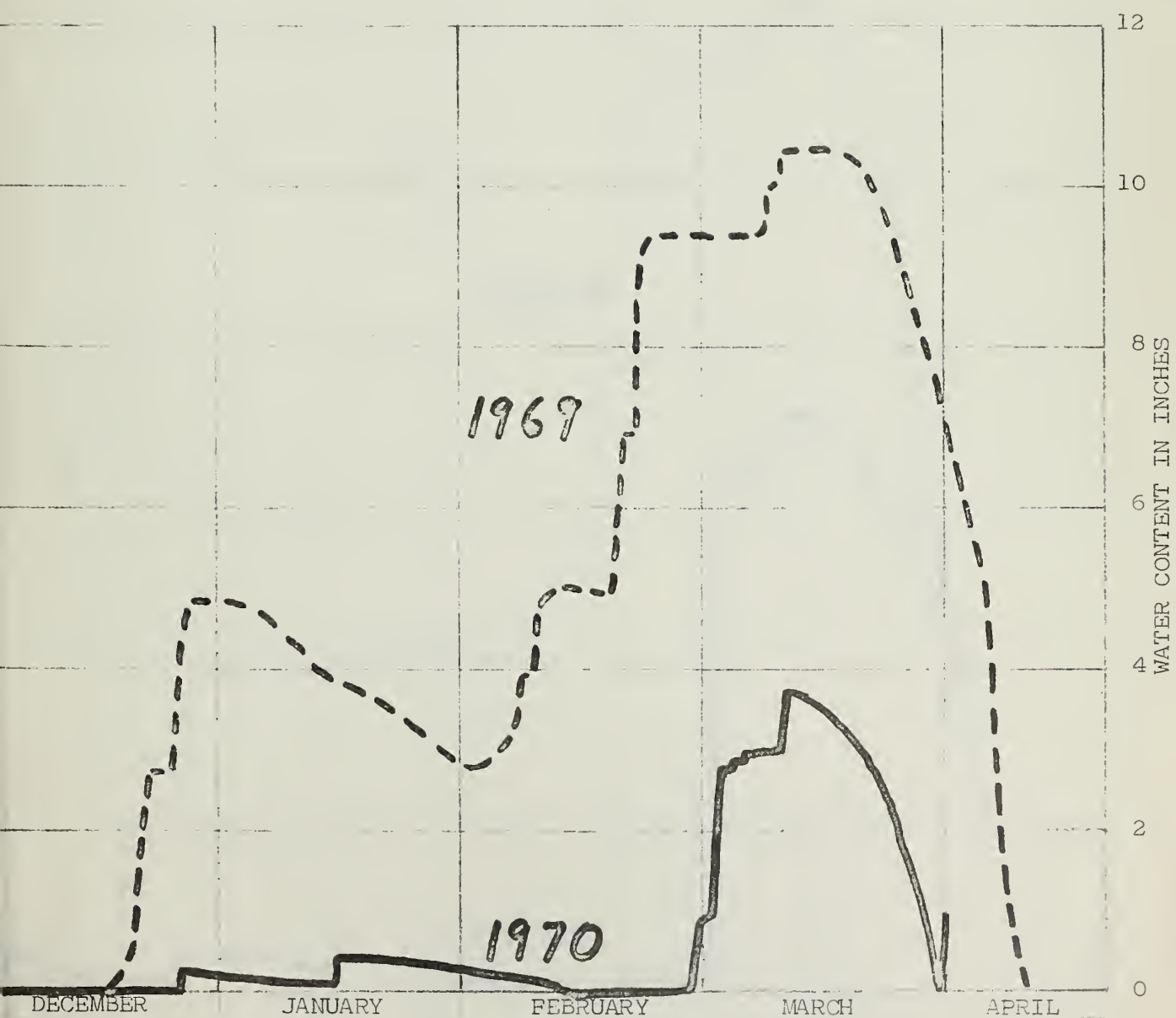
SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †
<u>VERDE RIVER</u>						
Baker Butte	7300	3/31	8	1.0	5.8	---
Camp Wood	5700	3/31	2	0.3	0.0	0.1
Chalender	7100	3/30	18	2.4	2.0	0.7
Copper Basin Divide	6720	3/31	1	0.2	0.0	0.0**
Fort Valley	7350	3/31	20	4.0	4.2	0.7
Gaddes Canyon	7600	3/31	15	3.6	10.0	2.6**
Happy Jack	7630	4/1	6	1.8	3.5	1.2
Iron Springs *	6200	3/31	1	0.3	0.0	0.0
Mingus Mountain	7100	3/31	5	1.0	0.0	0.1
Mormon Lake *	7350	3/31	11	1.8	2.6	1.6
Mormon Mountain	7500	3/31	18	3.6	8.7	2.5
Newman Park	6750	3/31	7	1.2	0.8	0.5**
Snow Bowl #1	10260	3/30	50	11.3	18.8	9.0**
Snow Bowl #2	11000	3/30	81	19.9	29.1	---
White Horse Lake Jct.	7150	4/1	9	2.1	2.0	---
White Spar	6000	3/31	0	0.0	0.0	0.0**
<u>LOWER COLORADO RIVER</u>						
Bill Williams Int.	8550	DELAYED			17.0	---
Bill Williams Summit	8950	DELAYED			20.6	---
Bright Angel	8400	N O S U R V E Y			---	---
Chalender *	7100	3/30	18	2.4	2.0	0.7
Fort Valley	7350	3/31	20	4.0	4.2	0.7
Grand Canyon	7500	3/30	5	1.3	---	0.4
Williams Ski Run	7720	4/1	34	7.9	10.9	---
<u>LITTLE COLORADO RIVER</u>						
Baldy #2 *	9750	3/19	60	17.3	28.1	---
Baldy	9125	3/30	14	4.0	9.9	5.3
Canyon Creek	7500	3/31	4	0.5	2.0	1.0**
Canyon Point	7600	3/31	5	0.6	1.3	---
Cheese Springs	8600	3/30	18	6.0	10.7	---
Forest Dale	6430	3/31	T	0.0	0.0	0.0
Ft. Apache	9160	3/30	23	6.9	9.6	6.1
Fort Valley	7350	3/31	20	4.0	4.2	0.7
Happy Jack *	7630	4/1	6	1.8	3.5	1.2
Heber	7600	3/31	4	0.5	2.6	1.1
Inner Basin #1	10100	DELAYED			30.0	---
Inner Basin #2	9750	"			17.6	---
Inner Basin #3	10250	"			17.1	---
McNary	7200	3/27	2	0.2	0.4	0.3
Mormon Lake	7350	3/31	11	1.8	2.6	1.6
Mormon Mountain	7500	3/31	18	3.6	8.7	2.5
Nutriosco	8500	3/31	0	0.0	1.6	0.2
Snow Bowl #1	10260	3/30	50	11.3	18.8	9.0**
Snow Bowl #2	11000	3/30	81	19.9	29.1	---
Wilson Lake *	9000	3/30	30	9.3	15.6	---
Baldy #3 *	10950	3/19	74	20.2	36.6	---
† 1953-67, 15-year average. (*) Adjacent drainage (**) 1953-67 Adjusted average. (A) Aerial observation: Water content estimated.						

S N O W P I L L O W D A T A

BAKER BUTTE

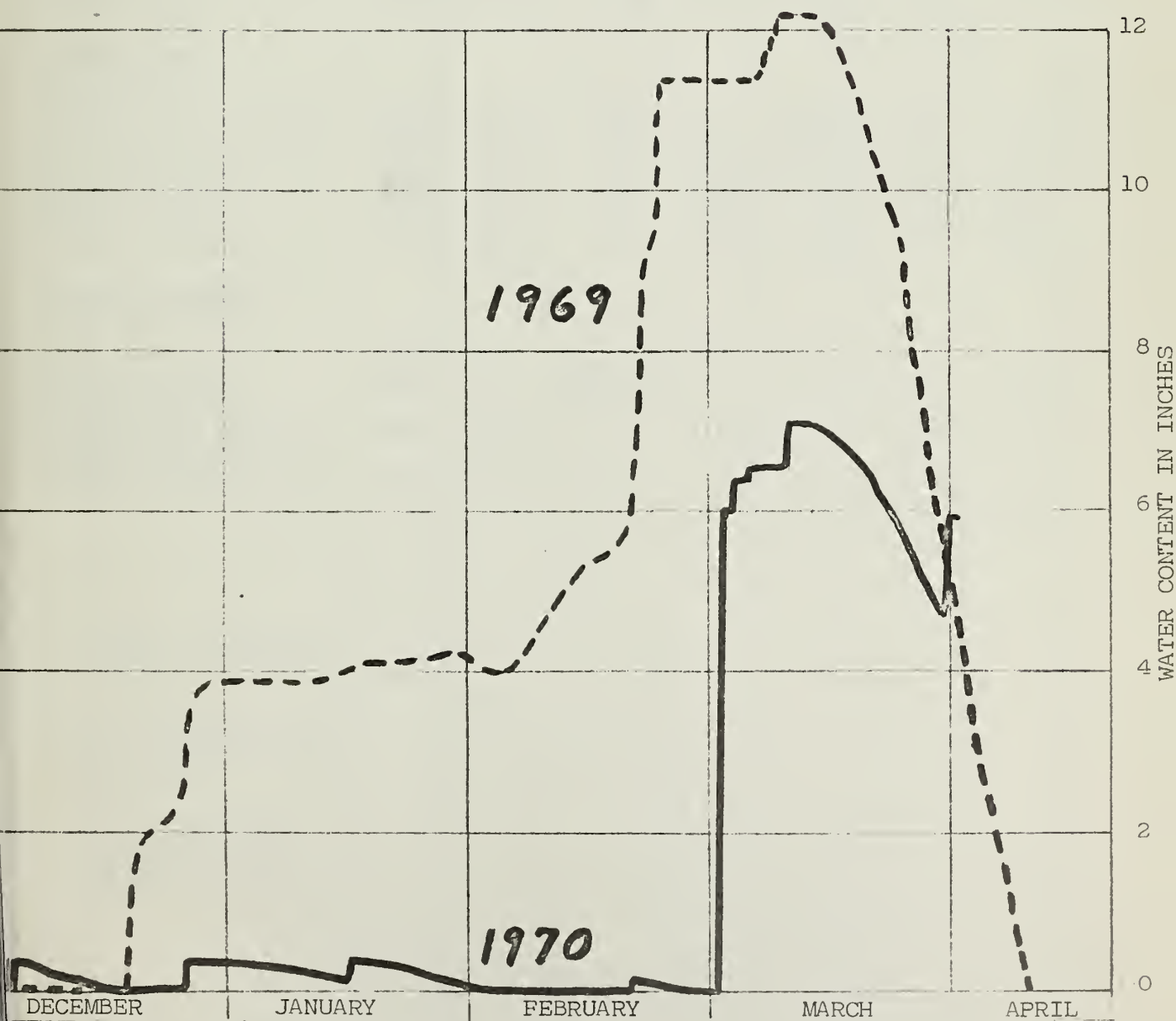
Elevation: 7300



S N O W P I L L O W D A T A

MORMON MOUNTAIN

Elevation: 7500



PRECIPITATION (Inches)

ABOUT APRIL 1, 1970

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. NOV. 1 TO DATE		
		Date of Reading	Month's Precipitation	Average †	This Year	Average †	Percent of Average
<u>GILA RIVER</u>							
Silver Creek Divide	9000	3/30	4.70	---	13.10	---	---
Hannagan Meadows	9030	---	---	3.14*	---	13.24*	---
<u>SALT RIVER</u>							
Canyon Point	7600	3/31	6.04	---	13.17	---	---
Hannagan Meadows	9030	---	---	3.14*	---	13.24*	---
Little Wildcat (Heber Snow Course)	7600	3/31	5.09	3.15*	11.54	14.52*	.79
Maverick Fork	9050	3/31	5.30	2.59*	11.15	12.52*	.89
Workman Creek **	6970	3/31	4.40	3.38	13.53	17.26	.78
Wilson Lake	9100	3/31	5.12	---	10.35	---	---
<u>VERDE RIVER</u>							
Baker Butte	7300	3/31	7.32	---	13.64	---	---
Copper Basin Divide	6720	3/31	6.88	---	10.66	---	---
Fort Valley **	7350	3/31	7.04	1.84	10.21	9.10	1.12
Happy Jack **	7480	3/31	4.87	2.42*	9.74	11.29*	.86
Mingus Mountain	7660	3/31	6.57	2.04	10.41	9.79	1.06
Mormon Mountain	7500	3/31	9.17	---	14.20	---	---
<u>LITTLE COLORADO</u>							
Inner Basin #1	9830	---	Delayed	---	---	---	---
Inner Basin #2	10050	---	Delayed	---	---	---	---
Sheep Crossing (Baldy Snow Course)	9125	3/31	5.03	2.34*	10.00	11.76*	.85
Little Wildcat (Heber Snow Course)	7600	3/31	5.09	3.15*	11.54	14.52*	.79
* 1953-67 Adjusted Average							
** Data Supplied by U.S. Forest Service							
Average is for 15-year period, 1953-67.							
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SOIL MOISTURE ABOUT APRIL 1, 1970

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average †
<u>GILA RIVER</u>							
Frisco Divide	8000	48	13.3	4/2	12.2	12.2	11.8
<u>SALT RIVER</u>							
Black River Divide	9100	48	16.8	3/30	18.0	18.4	16.3
Canyon Creek	7500	48	18.3	3/30	18.2	17.8	15.3
Corduroy Creek	6000	48	16.0	3/30	13.9	14.0	9.2
McNary	7200	48	16.3	3/30	17.2	18.0	15.4
<u>VERDE RIVER</u>							
Mormon Mountain	7500	48	16.1	3/30	17.7	17.8	16.6
Newman Park	6750	48	17.7	3/30	19.4	21.6	17.9
- 14 -							

SNOW COURSE

Baker Butte
Baldy
Bear Wallow
Beaver Head
Bill Williams Intermediate
Bill Williams Summit
Bright Angel
Camp Wood
Canyon Creek
Canyon Point
Chalender
Cheese Springs
Copper Basin Divide
Coronado Trail
Crazy Horse
Emory Pass
Forest Dale
Ft. Apache
Fort Valley
Frisco Divide
Gaddes Canyon
Grand Canyon
Hannagan Meadows
Happy Jack
Hawley Lake
Heber
High Peak
Hummingbird
Ice King
Inner Basin #1, #2, #3
Iron Springs
Maverick Fork
McKnight Cabin
McNary
Milk Ranch
Mingus Mountain
Mogollon
Mormon Lake
Mormon Mountain
Mt. Ord
Munds Park
Newman Park
Nutrioso
Redstone Trail
Rose Canyon
Silver Creek Divide
Smith Cienega
Snow Bowl #1 and #2
State Line
White Horse Lake Junction
White Spar
Whitewater
Williams Ski Run
Wilson Lake
Workman Creek

SNOW SURVEYOR

SCS - Dick Enz
SCS - Bill Cole
Forest Service - Carl Sollers
N. A. Josh
Forest Service - John Sotelo
Forest Service - John Sotelo
National Park Service - Kenneth Hulick, Dist. Rgr.
Forest Service - Walter G. Richardson
SCS - Dick Enz
SCS - Dick Enz
Forest Service - M. Freshour
SCS - Bill Cole
SCS - Bill Gray
Forest Service - John W. Holt and John O. Maeder
Forest Service - Loyd Barnett
SCS - Jim Powell and Travis Stevenson
Bureau of Indian Affairs - Raymond Endfield
SCS - Bill Cole
Rocky Mountain Forest & Range Exp. Station
Forest Service - J. M. Sanchez
Paul G. Lidbeck
National Park Service - Robert E. Scott, Dist. Rgr.
N. A. Josh
Forest Service - Don W. Witt
Bureau of Indian Affairs - Raymond Endfield
SCS - Dick Enz
Forest Service - Loyd Barnett
Ray Freeman
James R. Wray
SCS and USBR - Jack Jorgensen and Jay Roberts
SCS - Bill Gray
SCS - Bill Cole
Ray Freeman
Bureau of Indian Affairs - Raymond Endfield
Bureau of Indian Affairs - Raymond Endfield
Paul G. Lidbeck
James R. Wray
SCS - Jack Jorgensen
SCS - Jack Jorgensen
Salt River Project - Bill Warskow
SCS - Jack Jorgensen
SCS - Jack Jorgensen
Forest Service - John W. Holt and John O. Maeder
James R. Wray
Forest Service - Carl Sollers
James R. Wray
Salt River Project - Bill Warskow
Forest Service - Ky Porter
Forest Service - J. M. Sanchez
Forest Service - John Sotelo
SCS - Bill Gray
Ray Freeman
Forest Service - John Sotelo
SCS - Bill Cole
Rocky Mountain Forest & Range Exp. Station

The Following Organizations Cooperate in the Arizona Snow Survey Work

FEDERAL

Department of Agriculture

Soil Conservation Service

Forest Service

Apache Forest

Cocanina Forest

Caranado Forest

Gila Forest

Kaibab Forest

Prescott Forest

Racky Mountain Forest and Range Experiment Station

Tonto Forest

Department of Commerce

Weather Bureau

Arizona Section

Department of Interior

Bureau of Reclamation

Region III

Geological Survey

Arizona District

Bureau of Indian Affairs

Fort Apache Reservation

San Carlos Irrigation Project

National Park Service

Grand Canyon National Park

Gila Water Commissioner

Safford, Arizona

STATE

University of Arizona

Arizona Agricultural Experiment Station

Water Resource Research Center

IRRIGATION PROJECTS

Salt River Valley Water Users' Association

Phoenix, Arizona

San Carlos Irrigation and Drainage District

Coolidge, Arizona

PRIVATE

Southwest Forest Industries, Inc.

McNary, Arizona

Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

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